

## AIO 2025 Training Calendar

Computer Vision		Date
1	Introduction to Computer Vision	20/10
2	Deep Neural Networks ANN and Stochastic Gradient Descent	27/10
3	Image Classification 1: The Convolutional Classifier	3/11
4	Image Classification 2: Activation and Pooling	10/11
	Live Session	16/11
5	Data Augmentation	17/11
6	Kaggle	24/11
7	Introduction to OpenCV	1/12
8	Object detection with OpenCV	8/12
	Live Session	14/12
Advanced Topics		
1	Object Detection with YOLO5 part1	15/12
2	Object Detection with YOLO5: Roboflow: Data Gathering, Image Preprocessing and Annotation tool	15/12
3	Object Detection with YOLO5 part3: Application	15/12

Embedded systems		Date
1	Introduction : embedded systems, electricity basics	20/10
2	Serial and variables: Global and local variables, Serial communication	27/10
3	Digital output: Digital pins, LED blinking	3/11
4	Digital input: Push button, If statement	10/11
	Live Session	16/11
5	Analog output: LED brightness, Motor speed	17/11
6	Analog input: Temperature sensor, Automatic fan	24/11
7	Loops: For loop, Servo motor	1/12
8	Wireless communication Bluetooth connection	8/12
	Live Session	14/12
Advanced Topics		
1	Display: LCD	15/12
2	Internet of things: Introduction to ESP 32	15/12
3	Advance wireless communication: WIFI connection	15/12
4	API: Firebase with ESP32	15/12

Coding		Date
1	Output function: Print function, Variables	20/10
2	Inputs: Input function, Type conversion	27/10
3	Operators: Arithmetic operators, Logical operators	3/11
4	Decision making: If statement, Else statement	10/11
	Live Session	13/11
5	Flow control: For loop	17/11
6	Flow control: While loop	24/11
7	Collection data: Lists, Tuples, Sets, Dictionaries	1/12
8	Functions: Define functions, Call functions	8/12
	Live Session	11/12
Advanced Topics		
1	Classes	15/12
2	Advanced math functions and Math Module	15/12
3	Arrays	15/12
4	File Handling	15/12

Machine Learning		Date
1	Introduction to Machine Learning	20/10
2	Supervised Learning: Regression	27/10
3	Supervised Learning: Classification	3/11
4	Underfitting and Overfitting	10/11
	Live Session	13/11
5	Preprocessing Data: Cleaning, Encoding, Splitting	17/11
6	Evaluation Metrics	24/11
7	Practice Project	1/12
8	Research and Data Gathering	8/12
	Live Session	11/12
Advanced Topics		
1	Unsupervised Learning: Clustering	15/12
2	Pipelines	15/12
3	Mutual Information	15/12
4	Feature engineering	15/12

Cybersecurity		Date
1	Download and install Linux	20/10
2	Linux Fundamentals 1	27/10
3	Linux Fundamentals 2	3/11
4	Linux Fundamentals 3	10/11
	Live Session	12/11
5	introduction to Digital forensics	17/11
6	Basic programming using python	24/11
7	introduction to cryptography	1/12
8	introduction to web security + Open source intelligence (OSIT)	8/12
9	Reverse Engineering	15/12
	Live Session	17/12
Advanced Topics		
1	Web Hacking Fundamentals	22/12
2	Network Security and Traffic Analysis	22/12
3	Security Information and Event Management	22/12
4	Phishing	22/12